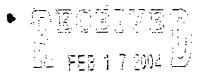
# 2 1 APR 2005

# PATENT COOPERATION TREA 10/532442



### From the INTERNATIONAL SEARCHING AUTHORITY

To:

THOMPSON LAMBERT LLP Attn. Thompson, Douglas B. 10328 - 81 Avenue, Suite 200 Edmonton, Alberta T6E 1X2	THE INTERNATIONAL SEARCH REPORT OR THE DECLARATION
Edmonton, Alberta T6E 1X2 CANADA	(PCT Rule 44.1)
	Date of mailing (day/month/year) 11/02/2004
Applicant's or agent's file reterence	
1764-9WO	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No.	International filing date
PCT/CA 03/01607	(day/month/year) 21/10/2003
Applicant	
NOETIC ENGINEERING INC.	
The applicant is hereby notified that the International Search	Pagert has been established and in transmitted because
<ol> <li>The applicant is hereby notified that the International Search Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claim</li> </ol>	·
When? The time limit for filing such amendments is normal International Search Report; however, for more detailed.	
Where? Directly to the International Bureau of WiPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Fascimile No.: (41–22) 740.14.35	
For more detailed instructions, see the notes on the accordance	npanying sheet.
2. The applicant is hereby notified that no International Search Article 17(2)(a) to that effect is transmitted herewith.	Report will be established and that the declaration under
3. With regard to the protest against payment of (an) addition	nal fee(s) under Rule 40.2, the applicant is notified that:
the protest together with the decision thereon has been applicant's request to forward the texts of both the prote	transmitted to the International Bureau together with the est and the decision thereon to the designated Offices.
no decision has been made yet on the protest; the appl	icant will be notified as soon as a decision is made.
4. Further action(s): The applicant is reminded of the following:	
Shortly after 18 months from the priority date, the international applicant wishes to avoid or postpone publication, a notice priority claim, must reach the International Bureau as provided in completion of the technical preparations for international publications.	of withdrawal of the international application, or of the n Rules 90 <i>bls</i> .1 and 90 <i>bls</i> .3, respectively, before the
Within 19 months from the priority date, a demand for international wishes to postpone the entry into the national phase until 30 more	I preliminary examination must be filed If the applicant this from the priority date (in some Offices even later).
Within 20 months from the priority date, the applicant must perforn before all designated Offices which have not been elected in the priority date or could not be elected because they are not bound	demand or in a later election within 19 months from the

Name and mailing address of the International Searching Authority

European Patent Office, P.B. 5818 Patentlaan 2 Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016

Authorized officer



These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

#### INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

#### What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

#### When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

### Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been its filed, see below.

#### How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

#### What documents must/may accompany the amendments?

#### Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.



The letter must indicate the differences between the claims as filed and the claims as amended, it must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

## The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51]:
   "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- [Where originally there were 15 claims and after amendment of all claims there are 11]:
   "Claims 1 to 15 replaced by amended claims 1 to 11."
- [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
   "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added," or "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- [Where various kinds of amendments are made]:
   "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

#### "Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

### It must be in the language in which the international appplication is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

### Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

### Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREM 10/532442



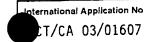


### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

A - a l'accepta es accepte file reference	T see Notification	of Francisco of International Court Depart
Applicant's or agent's file reference		of Transmittal of International Search Report 220) as well as, where applicable, item 5 below.
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/CA 03/01607	21/10/2003	21/10/2002
Applicant		
NOETIC ENGINEERING INC.		
	***************************************	
This International Search Report has been according to Article 18. A copy is being tra	n prepared by this International Searching Authansmitted to the International Bureau.	hority and is transmitted to the applicant
This International Search Report consists	of a total of 4 sheets.	
	a copy of each prior art document cited in this	s report.
1. Basis of the report		
With regard to the language, the language in which it was filed, unli	International search was carried out on the bas less otherwise Indicated under this item.	sis of the international application in the
the international search was Authority (Rule 23.1(b)).	ras carried out on the basis of a translation of th	he international application furnished to this
	d/or amino acid sequence disclosed in the in a sequence listing:	nternational application, the international search
] <del></del>	onal application in written form.	
filed together with the inter	rnational application in computer readable form	n.
furnished subsequently to	this Authority in written form.	
furnished subsequently to	this Authority in computer readble form.	
the statement that the sub- international application as	osequently furnished written sequence listing do s filed has been furnished.	pes not go beyond the disclosure in the
the statement that the infor furnished	rmation recorded in computer readable form is	s identical to the written sequence listing has been
2. Certain claims were foun	nd unsearchable (See Box I).	
3. Unity of invention is lack	(ing (see Box II).	•
* **** ******		
4. With regard to the title,	en e	
the text is approved as sub		
STATOR OF A MOINEAU-PUN	hed by this Authority to read as follows:	
SIMIOR OF A MOINDAG-FOR	49	
5. With regard to the abstract,		
X the text is approved as sub	omitted by the applicant,	
the text has been establish	ned, according to Rule 38.2(b), by this Authority date of mailing of this international search repo	y as it appears in Box III. The applicant may, ort, submit comments to this Authority.
6. The figure of the drawings to be publis		1
X as suggested by the applica		None of the figures.
because the applicant failed		
because this figure better c		·

### INTERNATIONAL SEARCH REPORT



CLASSIFICATION OF SUBJECT MATTER
. C 7 F 04C2/107

According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 - F04C - B21D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
FR 2 826 407 A (PCM POMPES) 27 December 2002 (2002-12-27) page 7, line 21 -page 8, line 11; claims 1,5,7; figures 1,2 page 10, line 25 -page 11, line 29	1,4-6, 13-15,17
US 6 336 796 B1 (CHOLET HENRI ET AL) 8 January 2002 (2002-01-08)	1,4-6, 13-15, 17,18
column 5, line 48 -column 6, line 13; figures 9-11	8,11,12
EP 0 459 740 A (MONO PUMPS LTD) 4 December 1991 (1991-12-04)	1-3
the whole document	8,11,12
4 December 1991 (1991-12-04) the whole document	8,11,1
	FR 2 826 407 A (PCM POMPES) 27 December 2002 (2002-12-27) page 7, line 21 -page 8, line 11; claims 1,5,7; figures 1,2 page 10, line 25 -page 11, line 29  US 6 336 796 B1 (CHOLET HENRI ET AL) 8 January 2002 (2002-01-08)  column 5, line 48 -column 6, line 13; figures 9-11  EP 0 459 740 A (MONO PUMPS LTD) 4 December 1991 (1991-12-04) the whole document

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.	
Special categories of cited documents:  A' document defining the general state of the art which is not considered to be of particular relevance.  E' earlier document but published on or after the international filing date.  L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified).  O' document referring to an oral disclosure, use, exhibition or other means.  P' document published prior to the international filing date but later than the priority date claimed.	<ul> <li>'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>'Y' document of particular relevance; the claimed Invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>'&amp;' document member of the same patent family</li> </ul>	
Date of the actual completion of the International search	Date of mailing of the international search report	
3 February 2004	11/02/2004	
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Riiswilk	Authorized officer	
Tel. (+31-70) 340-2040, Tx. 31 651 epo nt, Fax: (+31-70) 340-3016	Descoubes, P	



oternational Application No

Delivers to plain No.	DE 31 19 568 A (BIG DUTCHMAN INT AG) 2 December 1982 (1982–12–02) abstract; figure 1  US 6 409 226 B1 (KAISER TRENT MICHAEL VICTOR ET AL) 25 June 2002 (2002–06–25)	DE 31 19 568 A (BIG DUTCHMAN INT AG) 2 December 1982 (1982–12–02) abstract; figure 1  US 6 409 226 B1 (KAISER TRENT MICHAEL VICTOR ET AL) 25 June 2002 (2002–06–25)  Relevant to claim No.  1–19  1–19  1–19  1–19	DE 31 19 568 A (BIG DUTCHMAN INT AG) 2 December 1982 (1982-12-02) abstract; figure 1  US 6 409 226 B1 (KAISER TRENT MICHAEL VICTOR ET AL) 25 June 2002 (2002-06-25)	DE 31 19 568 A (BIG DUTCHMAN INT AG) 2 December 1982 (1982–12–02) abstract; figure 1  US 6 409 226 B1 (KAISER TRENT MICHAEL VICTOR ET AL) 25 June 2002 (2002–06–25)  Relevant to claim No.  1–19  1–19  1–19
DE 31 19 568 A (BIG DUTCHMAN INT AG) 2 December 1982 (1982-12-02) abstract; figure 1  US 6 409 226 B1 (KAISER TRENT MICHAEL VICTOR ET AL) 25 June 2002 (2002-06-25)	DE 31 19 568 A (BIG DUTCHMAN INT AG) 2 December 1982 (1982-12-02) abstract; figure 1  US 6 409 226 B1 (KAISER TRENT MICHAEL VICTOR ET AL) 25 June 2002 (2002-06-25)	DE 31 19 568 A (BIG DUTCHMAN INT AG) 2 December 1982 (1982-12-02) abstract; figure 1  US 6 409 226 B1 (KAISER TRENT MICHAEL VICTOR ET AL) 25 June 2002 (2002-06-25)	DE 31 19 568 A (BIG DUTCHMAN INT AG) 2 December 1982 (1982-12-02) abstract; figure 1  US 6 409 226 B1 (KAISER TRENT MICHAEL VICTOR ET AL) 25 June 2002 (2002-06-25)	DE 31 19 568 A (BIG DUTCHMAN INT AG) 2 December 1982 (1982-12-02) abstract; figure 1  US 6 409 226 B1 (KAISER TRENT MICHAEL VICTOR ET AL) 25 June 2002 (2002-06-25)
2 December 1982 (1982-12-02) abstract; figure 1 US 6 409 226 B1 (KAISER TRENT MICHAEL VICTOR ET AL) 25 June 2002 (2002-06-25)	2 December 1982 (1982-12-02) abstract; figure 1 US 6 409 226 B1 (KAISER TRENT MICHAEL VICTOR ET AL) 25 June 2002 (2002-06-25)	2 December 1982 (1982-12-02) abstract; figure 1 US 6 409 226 B1 (KAISER TRENT MICHAEL VICTOR ET AL) 25 June 2002 (2002-06-25)	2 December 1982 (1982-12-02) abstract; figure 1 US 6 409 226 B1 (KAISER TRENT MICHAEL VICTOR ET AL) 25 June 2002 (2002-06-25)	2 December 1982 (1982-12-02) abstract; figure 1 US 6 409 226 B1 (KAISER TRENT MICHAEL VICTOR ET AL) 25 June 2002 (2002-06-25)
VICTOR ET AL) 25 June 2002 (2002-06-25)	VICTOR ET AL) 25 June 2002 (2002-06-25)	VICTOR ET AL) 25 June 2002 (2002-06-25)	VICTOR ET AL) 25 June 2002 (2002-06-25)	VICTOR ET AL) 25 June 2002 (2002-06-25)

# INTERNATIONAL SEARCH REPORT

Information on patent family members

nternational Application No

Patent document clted in search report	Publication date		Patent family member(s)	Publication date
FR 2826407 A	27-12-2002	FR WO	2826407 A1 03008807 A1	27-12-2002 30-01-2003
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US 6409226 B	25-06-2002	AU WO CA GB NO	4387800 A 0067930 A1 2307488 A1 2363587 A ,B 20015331 A	21-11-2000 16-11-2000 05-11-2000 02-01-2002 07-01-2002